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cancel

face 221 of the spline 220. Each side 222 of the spline thus has a rounded portion 222a having the same radius of curvature R_a as the rounded portion 252a, a rectilinear portion 222b parallel to the portion 252b when the pole piece 230 is in place on the shaft 210, and a rounded portion 222c having the same radius of curvature R_c as the portion 252c. The radially inner edges 233 of the pole piece 230 situated on either side of the slot 250 are set back from the regions 213 of the shaft 210 situated between the splines 220, as can be seen in Figures 17 and 18, in particular. A gap 260 is thus left between two adjacent splines 220, the pole pieces 230 engaged on the splines, and the shaft 210.

Page 18, line 28 - page 19, line 2, delete current paragraph and insert therefor:

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The radially outer side 235 of a pole piece 230 is of circular cross-section, and has a radius of curvature that is smaller than the maximum radius of the rotor such that each pole piece 230 presents an outside face which forms a slightly outwardly convex lobe, as can be seen in Figure 18. The bulging shape of the pole pieces 230 makes it possible to reduce torque ripple and also to establish a flow of cooling air. In the example described, the shape of the outer side 235 and the ratio of the radial dimension of the magnets over their width is selected so as to have $L_q = L_d$ so that the motor turns without the reluctance effect.

IN THE CLAIMS:

Please replace claims 1-5, 7-10, 13-19, 21-23, 25, 26 and 28-34 as follows:

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1. (Amended) A rotary electric machine comprising:
 - a flux-concentrating rotor comprising permanent magnets disposed between pole pieces; and
 - a stator comprising teeth having a free end deprived of pole swellings and a concentrated winding.